



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,366	03/03/2004	Chih-Chiang Su	10113881	4262

34283 7590 07/27/2005

QUINTERO LAW OFFICE
1617 BROADWAY, 3RD FLOOR
SANTA MONICA, CA 90404

EXAMINER

VU, PHU

ART UNIT	PAPER NUMBER
----------	--------------

2871

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/792,366

Applicant(s)

SU, CHIH-CHIANG

Examiner

Phu Vu

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: Claim 1, 9 and 13 as well as the figures fail to show any connection between the anti-ESD wire and LCDM. Applicants specification refers to this in [0039] however, the anti-ESD wire element 23 appears to only connect elements 24 which are external connectors that surrounding portion to the ground layers. Fig. 2 clearly nor the claim appears to indicate how element 23 is connected to element 21 as the specification would imply is required. For examining purposes this is interpreted met by reference Park used in claim 1 rejection. Thus all dependent claims from 1, 13 and 19 are rejected as well.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-7, 9-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al US Publication No. 2003/0071767 in view of Cha et al. US Patent No. 6519020.

Regarding claims 1, 9 and 13, Yoo discloses an electronic device comprising: a liquid crystal display module, an anti-ESD wire, and a first contact (fig. 2 VSS) , and the anti-ESD wire is disposed on the surrounding portion and the first contact is coupled to the anti-ESD wire and the ground layer (fig. 2 element connected to VSS) respectively so that ESD in the liquid crystal display module is ground via the anti-ESD wire and the first contact; and a controller (fig. 2 element 200) and coupled to the liquid crystal display module, for resetting the liquid crystal display module at a predetermined interval (fig. 3a element S14). The reference fails to show a central portion and a surrounding portion, or a printed circuit board including a ground layer, wherein the central portion is surrounded by the surrounding portion, and wires of the liquid crystal display module are schemed between the anti-ESD wire and the central portion. However, Park's structure is merely a wiring schematic. Cha discloses a display device with a display portion (fig. 3 element 10), and a central portion (fig. 3 element 14), and a surrounding portion (fig. 3 element 62) that is slim and lightweight (see abstract). Since only the LCD is placed on the central portion all other elements such as the anti-esd wire (wire connecting VSS to ground) would be placed on the surrounding portion. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to provide a central portion with a liquid crystal display module and

surrounding portion with driving elements to create a display that is slim and lightweight (see abstract).

Regarding claim 9, this claim mirrors claim 1 as it claims providing the device of claim 1 and operating it (see fig. 3a).

Regarding claim 13, Park shows decision logic (see fig. 2 element 220) which can be considered machine-readable storage medium which when executed, causes a computer to perform the method for preventing ESD

Regarding claim 2, Park the anti-esd wire as shown in claim 1, can be considered the ground wire as it is connected to ground a first terminal.

Regarding claim 3, Park shows second contacts outside of first contacts (fig. 2 VR, VDD, VS, etc.).

Regarding claim 4, Park shows a second wire connecting one of the second contacts (fig. 2 element VR) to a controller (fig. 2 200).

Regarding claim 5, the reference Cha shows the display portion (see fig. 3 element 12) to be the center of the liquid crystal display module as liquid crystal is found between elements 12 and 14 (see column 4 lines 37-40).

Regarding claim 6, Cha shows the surrounding portion so be circuit layout region (see fig. 3).

Regarding claim 10, Park shows making a level of the liquid crystal display module back to a predetermined value so as to reset the liquid crystal module (see fig. 3A element S14).

Regarding claims 7, 11 and 15, Park and Cha do not explicitly show any of the wires made of ITO, however applicant fails to teach any advantage to ITO. However, ITO is a transparent conductive material, therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to use ITO as wiring in order to have transparent wiring.

Claims 8, 12, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Cha and further in view of Yuuki et al. US Patent No. 6181071.

Regarding claim 8 and 12 and 16, Park and Cha disclose all the limitations of the claim except wire width of .15 mm to .35 mm. Yuuki discloses a wire with of .1 mm – 1 mm to serve as a shield against electromagnetic waves (See column 8 lines 22-30). The MPEP section 2144.01 states In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Therefore, at the time of the invention, it would have been obvious to use wire widths of .15 to .35 mm to serve as electromagnetic shielding.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

Art Unit: 2871

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu Vu
Examiner
AU 2871



ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800